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ABSTRACT

Inherent in the middle school philosophy is the recognition that students vary widely in their stages of physical, cognitive, and affective development. A special school is needed to meet the unique requirements of these transitional youth. The history and present trends of the middle school reflect dissatisfaction with the junior high school. A chapter on the middle school program distinguishes between general notions of curricular theory and specific curricular practices. The first part discusses three different curricula. The second part of the chapter takes up a discussion of some of the innovative classroom organization and teaching practices that have become almost synonymous with the middle school movement. The lack of special inservice education for middle school teachers, principals, and counselors is attributed to lack of commitment and initiative by colleges of education and state education departments. The report concludes that the real issue in intermediate education is whether any of the progressive reforms of the middle schools and junior highs will be retained during a period of economic retrenchment in school districts. (Author/MLF)

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Nan Coppock and Norman Hale

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FOREWORD

Both the Association of California School Administrators and the ERIC Clearinghouse on Educational Management are pleased to cooperate in producing the *School Management Digest*, a series of reports designed to offer educational leaders essential information on a wide range of critical concerns in education.

At a time when decisions in education must be made on the basis of increasingly complex information, the *Digest* provides school administrators with concise, readable analyses of the most important trends in schools today, as well as points up the practical implications of major research findings.

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The authors of this report, Nan Coppock and Norman Hale, were commissioned by the Clearinghouse as research analysts and writers.

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INTRODUCTION: THE MIDDLE SCHOOL PUPIL

> Interviewer: If there were one thing about this school you could change, what would it be?
>
> First Pupil: The teachers are good, but sometimes they forget how smart they are and how dumb we are. I would like to have shorter units so I could learn it all.
>
> Second Pupil: Nothing really needs changing. I just want to get rid of these bugs. We tried keeping the windows and doors shut, but it got hot. Bugs got in the cookies in home ec.
>
> *Selections from* Weber, "The Grassroots: Interviews with Middle School Students"

One pupil talks about the quality of teaching, while the next complains of insects in the cookie jar. This disparity in maturational levels points up the difficulty of identifying a "typical transescent." It was Donald Eichhorn who, in the early sixties, coined the term *transescence* to describe the transitional period between childhood and adolescence. Others have called these transitional youth "emerging adolescents," "in-between-agers," "children-in-the-middle," "preadolescents," and "early adolescents."

However they are labeled, they are a most heterogeneous group with respect to physical, intellectual, and emotional development.

Note the following additional illustrations from Weber's interviews: One student likes to do experiments "to see if the books are right," while another likes to "learn new words and surprise my father. He thinks I'm dumb." If he could study something not presently offered in his school, one boy requested "football. We don't play it here, I mean the real kind. I want to play like Roosevelt Grier and need to get started now." More altruistic motives were expressed by two other students, who requested "sewing—to make clothes for my sisters and brothers when I grow up," and "health. My baby

sister died, and I don't want no one else in the family to."

While educators recognize the wide range of individual differences among emerging adolescents, they usually end up relying on some artificial means of categorizing them. The most common divisions are according to grade and/or age level. The middle school range covers grades four through nine and ages nine through fifteen. But it is most often limited to grades five or six through eight, or ten- to fourteen-year-olds.

Throughout this paper, the students themselves are the center of attention. Recurrent themes include individual attention and continuous progress up the "school ladder."

HISTORICAL ROOTS AND PRESENT TRENDS

The middle school—an institution designed expressly to serve the needs of intermediate pupils—is one of the major educational innovations of the past two decades. Although the first official middle school was founded in Bay City, Michigan, in 1950, it was not until the late fifties and early sixties that a true middle school movement began to take hold. As noted by Lounsbury and Vars, some intermediate schools were designated "middle schools" forty years ago, but a "middle school philosophy" did not emerge until the fifties.

History of Intermediate Education

Despite the relatively recent birth of middle schools, their history is actually that of intermediate education in general. One way of looking at this history is the cyclical view, which sees the same pattern repeated over and over. Lounsbury and Vars, for example, see the emphasis in intermediate education in this century alternating between academic and progressive poles; the junior high has gone through periods of each, and the middle school movement marks the swing back to the progressive.

Another view looks at specific events or individuals as the impetus for the particular path intermediate education has taken. The person usually held responsible for the birth of intermediate education is G. Stanley Hall, who in 1904 contributed to the already notable problems of elementary and secondary education by suggesting that there was an "adolescent age" requiring its own in-between level of schooling. Hall defined the childhood period as gradually terminating at the end of the twelfth year, with the transition to adolescence beginning at that point. Although many educators disagreed with Hall's identification of three rather than two periods of growth and development, they often had their own reasons for

seeking to implement an intermediate educational level. And Hall provided them with ready justification.

The resulting institution was the junior high school. In its early years the new intermediate school received its greatest push, according to Ball, from universities, advocates of vocational education, an educational community faced with overcrowding, and teachers wanting new and improved facilities. To these sources of impetus for reorganization, Lounsbury and Vars add three more groups. Public school educators supported the junior high as a means of bridging the gap between elementary and secondary programs and hoped to make schooling more relevant to daily life through the earlier introduction of vocational education. Civic and government leaders saw the junior high as a possible solution to the societal problem of "Americanizing" immigrants. And taxpayers hoped to save money by cutting down the large numbers of repeating students.

Following World War I such administrative factors as the need for new school buildings to relieve overcrowding (why not an intermediate school?) entered the picture. Odetola and others suggest that junior high schools were instituted to extend secondary education downward to students who ended their formal education at the minimum legal age. A junior high would at least expose them to some measure of the secondary school experience. In short, by 1930 nearly half of all secondary pupils were attending reorganized schools.

Subsequent educational developments are summarized by Eichhorn (1972). The most significant was the belief that children at all ages were maturing faster intellectually, socially, emotionally, and personally than in the thirties and forties. This belief contributed to the pressure brought to bear in some cases to put the ninth grade back in the high school.

Today, Lounsbury and Vars estimate, 80 percent of American youth go through some sort of intermediate school. As noted earlier, since midcentury the trend has been toward middle schools. Many of the purposes behind the middle school movement are identical with those behind the earlier innovations in intermediate education. Again, concerns over

bridging the gap, overcrowding, and the growth characteristics of adolescents and preadolescents are cited by various authors as reasons for a new kind of intermediate educational reorganization. Also mentioned are desegregation, curricular innovations, the bandwagon effect, and inability to pass school budgets.

Patterns of Organization

Figures from 1968 through 1974, listed in table 1, reveal the relative growth of different types of middle school organizations. Preferences for an organizational pattern that includes grades six through eight were noted in 1968. Subsequent surveys indicated a continuation of this trend, with this organization gaining while the pattern of grades five through eight declined proportionately.

It is important to note differences in definitions for each study. The 1968 figures define a middle school as one that "combines into one organization and facility certain school years usually 5 through 8." The 1970 and 1974 surveys characterize the middle school as generally consisting of "grades 4 through 8 with at least two but not more than three grades including 6 and 7 or 7 and 8."

Table 1
Types of Middle School Organization

Year of Survey	1968	1970	1974
Number of Middle Schools	1,101	2,298	3,723
Grade Patterns			
6-8	60.0%	58.2%	60.0%
5-8	27.3%	25.4%	23.4%
4-8	7.3%	6.1%	6.6%
5-7	2.7%	2.5%	3.8%

Source: Data from the three surveys are quoted by M. F. Compton (1976): 1968 from Alexander, 1970 from Kealy, and 1974 from M. F. Compton (1976).

A Slowing Trend

The middle school movement apparently has slowed down somewhat since 1968, when Alexander observed that the number of middle schools had doubled every other year since 1962. One thing is clear, however, as Gatewood and Dilg note: "In terms of numbers and recognition, the middle school has arrived. From its modest beginnings in the early 1950's and 1960's through its incredible growth in numbers in the mid- and later 60's and the early 70's, the middle school has been one of the remarkable phenomena in the history of education. Only in the past two years or so has there been a slowing in the increase in numbers of middle schools, which have grown at a geometric rate every two years since 1965."

Surveys of the middle school are largely tentative because we are dealing with an innovative educational concept. Until 1950 that concept was unknown. The appearance of a decline in the rate of middle school growth is due in part to the gradual narrowing and refining of the definition. Although there is now greater consensus regarding the primary aims of middle schools than there was in the initial stages of the movement, such issues as organizational bases, curricula, and teaching methods are still vigorously debated.

With only a little over a decade behind it, the middle school movement is certainly not ready for a comprehensive historical study. Nor can its success or failure be fairly judged yet. But its rapid growth over the past several years demands some sort of progress report, as well as indications of how present efforts to educate emerging adolescents might be enhanced.

Although many middle schools continue to emphasize age and/or grade levels, most middle school advocates subscribe to a "middle school philosophy." Inherent in this philosophy is the recognition that these students vary widely in their stages of physical, cognitive, and affective development. A special school is needed to meet the unique requirements of these transitional youth.

Student Growth Characteristics

While the developmental approach is also a part of the junior high rationale, it has received renewed emphasis in the middle school movement.* In fact, Eichhorn (1972) feels that "there is only one middle school differentiation, and that is the developmental uniqueness of its student clientele; there *are* different levels of physical, mental, and social development."

Moss (November 1971) decries the formation of middle schools for such reasons as overcrowding and bandwagoning but thinks there is plenty of justification for implementing middle schools based on the growth characteristics of children. Between them, Eichhorn and Moss define the two bases of the developmental argument—early maturation and multilevel variance.

Not everyone agrees with the developmental rationale. Lounsbury and Vars, for example, voice the belief that "a smoke screen of rhetoric about the educational, social or psychological advantages . . . arguments that simply do not hold up under analysis" too often hide the real reasons for middle school implementation.

The early maturation hypothesis is based on studies of physical, intellectual, and personality development, which

*Kagan's contribution to the special middle school issue of *National Elementary Principal* provides an interesting and knowledgeable discussion of adolescent psychology, which is not dealt with in this paper.

show that sixth (and possibly fifth) graders are in the transitional rather than the childhood period. Or as Ball puts it, fifth and sixth graders are more like seventh and eighth graders than they are like pupils from the fourth grade down. Evidence of the transescent's physical, intellectual, and personality changes causes M. F. Compton (1972) also to endorse this view. Davis notes that Havighurst, Mead, and Wattenberg have all vouched for earlier adolescence among today's youth. Earlier peer culture influence, cited by Smith, also supports this view.

Behind the second part of the developmental rationale is the realization that people mature on different timetables, and that the variance among levels of physical, cognitive, and emotional maturation is most pronounced among transescents. Compton, for instance, suggests nine components for middle schools, based on her observations that, from day to day, ten-to fourteen-year-olds differ within their total group, sexual groups, and even themselves. Therefore the middle school program ought to be designed with their different and ambivalent natures in mind.

Opinions vary on the particular characteristics of age- and grade-level groups within the intermediate range. Some debate the elementary/middle school line of demarcation as it relates to fifth and sixth graders, or ten- and eleven-year-olds. Moss feels that fifth graders "resemble children more than they resemble early adolescents"; thus "elementary school educators should definitely question moving them to a unit supposedly existing for early adolescents." He notes that a majority of principals still favor keeping ten-year-olds in elementary schools.

Moss cites Glissmeyer's finding that there were no significant differences in IQs or academic achievement between sixth graders in elementary and middle schools. Both researchers conclude that—at least for this age group—there is no viable basis for assigning overall superiority to either type of organization or grouping arrangement.

On the other hand, Ball compared sixth graders in an elementary school with those in a middle school on criteria of (a) interaction between teacher and student and (b) educa-

tional output. He found that while neither type of school was more effective when examining their total scores, there *were* differences in individual variables. Razzell insists that the variance in abilities and skills of eleven-year-olds being promoted from primary to secondary grades warrants curriculum planning based on concern for the individual rather than on the type of institution in which learning takes place.

Although Moss explicitly favors the placement of eleven-year-olds in middle schools because of earlier onset of puberty, he pauses to raise certain questions for those considering a middle school for ages eleven through fourteen. "If the purposes and programs of the middle school reflect attention to the growth characteristics of 11- to 14-year-olds, [we] should be favorably inclined toward them," Moss concludes, but if not, then either the school should be transformed or the students returned to the elementary school.

Gatewood, quoting Dacus, observes that sixth graders are closer to seventh than to fifth graders in social and physical maturity and in opposite sex choices, and that ninth graders are more compatible with tenth graders. Eichhorn (1972) criticizes the emphasis on grade level and vertical organization, though he realizes that these have been major forces in the evolution of the middle school. Both junior high and middle schools have claimed to bridge the elementary/secondary gap, but in practice they have been "one step lower than high school," Eichhorn comments. Now they are beginning to be thought of as "one step higher than elementary."

Reforming the Junior High School

In light of all the other reasons for seeking a new type of intermediate educational organization, it may seem surprising that the most frequently mentioned is dissatisfaction with the junior high school. Many middle school proponents consider the junior high school so hopelessly flawed that it either is, or should be, approaching extinction. Some even speak of the middle school primarily as "what the junior high is not."

Eichhorn's view, however, is less extreme and at the same time an accurate statement of the chief criticism of junior

highs: "Many excellent junior high schools are to be found throughout the nation; but too many, especially since the 1950's, have sought to be, and truly have been, merely a 'junior' to the high school."

Numerous writers criticize junior highs for being miniature copies of secondary schools. From both instructional and extracurricular standpoints, these "junior senior highs" focus on what will happen later—not now—to the student. As McQueen notes, the educational program is not specifically designed and relevant for the in-between youngster, and outside activities consist of such things as marching bands, cheerleading, and interscholastic sports. The list of related charges leveled at the junior high school is long.

Perhaps the most interesting criticisms are two mentioned by McQueen. She repeats complaints that the junior high has forfeited its original goals to solve administrative problems such as overcrowding. Also, she maintains that those goals were not well planned in the first place but were developed as an expedient to correct weaknesses in the 8-4 plan. The allegations are interesting for two reasons.

First, the practice of reorganizing for administrative rather than educational reasons is more true of middle schools than of junior highs, according to Gatewood. Second, although the charge of ill-conceived or poorly rationalized goals may provide a convenient excuse for finding fault with the junior high concept, the fact remains that the middle school philosophy is in many ways identical to that of the junior high. Moreover, most "junior high flaws" are not exclusive to that type of intermediate organization.

Not everyone has jumped on the middle school bandwagon. The junior high has much to recommend it, and junior high schools continue to emerge alongside middle schools. The placement of fifth and sixth graders with older students is questioned by Baruchin, while both Jennings and Popper favor junior highs over middle schools *(see* Baruchin, Jennings, and Popper in Moss [November 1971]). Lounsbury and Vars note that "the junior high school has served rather well as a pilot school for educational innovations, such as core curricu-

lum and team teaching," and it "has enjoyed tremendous success in terms of administrative organization." Moreover, they add, it is hardly surprising that the junior high "has failed to implement broadly the full aspirations of its supporters . . . in view of the fantastic claims made by some . . . advocates."

A Synthesis of Programs

While the middle school program was originally conceived as an alternative to a flawed junior high school, many observers see great similarities between them. Chiara and Johnson cite a number of negative characteristics:

- No definite pattern of grade organization (options include 5-8, 5-9, 6-8, 6-9, 7-8, 8)
- Establishment for the wrong reasons, that is, other than to develop programs specifically designed to meet the needs of the students they are set up to serve
- Lack of unity of purpose and innovative programs to meet the needs of both a changing early adolescent and a changing world (for example, middle school instructional programs in grades seven through nine are comparable to those in junior highs, and grades five and six are still segregated in the new middle school organization and given a repeat performance of the traditional elementary programs)
- They are ignored by teacher education institutions

Among the positive characteristics they share are the opportunity to develop innovative programs that meet the needs of this divergent age group and the opportunity to break the traditional patterns of teacher education.

Despite alleged differences between middle schools and junior highs, Lounsbury and Vars report "very few significant differences revealed so far between junior highs and middle schools" in various surveys. In one study, Gatewood and Walker matched 138 junior highs and 138 middle schools. They found most of the organizational structures and instructional processes of both school types to be similar to preceding programs and organizations for the intermediate school years. In another survey, Davis used eight criteria to test the claimed advantages for middle schools with observations of actual practice. His study yielded no definite conclusions regarding

the relationship between middle school theory and practice.

In a Dade County, Florida, study of three junior highs and one middle school, Trauschke and Mooney tested hypotheses stating the superiority of middle school students in achievement tests, attendance, attitudes toward school, and self-concept. Only in the areas of attendance and attitude was the middle school found superior. "As a whole," Doob reports, the surveys and questionnaires summarized in her research brief "do not strongly support the claims of middle school advocates or critics. In each area, findings vary widely."

Based on his own study and another of broader scope, Gatewood draws four conclusions about the middle school. In terms of educational programs and practices, existing middle schools and junior highs have been found generally to be more similar than different. Some differences exist in thinking and philosophy between the two schools, but not necessarily in practice. Implementation of the middle school concept, either by middle schools or junior highs, exists more in the ideal than in reality. Finally, there is no definitive answer on whether a middle school or a junior high grade/age organizational structure is more desirable in terms of physiological and sociological grouping.

While the similarity of the middle school to the present junior high school is deplored by some people, the likenesses are not cause for alarm. It is true in some cases that middle schools, instead of representing a totally new program, retain many of the weaknesses of the junior highs and are similar to them.

On the other hand, the similarity between programs can be interpreted in a more optimistic way. In many instances middle schools and junior highs are similar because the junior high school has been changing along with the middle school. The junior high, in fact, has adopted many of the innovations pioneered by the middle school movement. It is not so obvious that middle schools are being perverted to the old procedures of the junior high school. Perhaps philosophy and practice are drawing both kinds of schools into a middle area where it becomes difficult to define either a purely traditional junior

high school or a completely innovative middle school.

With the greatest growth of the middle school over, it seems unlikely that middle schools will completely replace the junior high. However, the middle school philosophy and curriculum rationales have served in themselves as an important call to reevaluate intermediate educational programs; this concern for reevaluation has benefitted the junior high school. Eichhorn (1973) observes that the movement has "prompted a reconsideration of the purpose and programs for the transescent learner." It has "pioneered organization and learning strategies" and focused the attention of universities, boards of education, and the public on the problems of the education of middle-school-age students.

Both Eichhorn and Gatewood concur that educators have been wasting time and resources trying to resolve the middle school/junior high controversy, when they should be putting primary emphasis on the development of an educational program consistent with the diverse needs of the emerging adolescents. Both would agree with Lounsbury and Vars that a fresh approach to the goals for schools—however they are organized—and for adolescents—whatever they are called—is needed: "Only the passage of time will reveal how much further the middle school will retrace the junior high cycle. But it seems certain that it will be no less influenced by the varied realities of school size, pupil population, and existing buildings than was the junior high school before it."

Despite the robustness and the seeming solidarity of the middle school movement, there is really little agreement about the specific form a program should take. The actual middle school program, assembled by bits and pieces, is often very eclectic. In order to simplify the discussion, this chapter distinguishes between general notions of curricular theory and specific curricular practices. The first part discusses three different curricula. The second part of the chapter takes up a discussion of some of the innovative classroom organization and teaching practices that have become almost synonymous with the middle school movement.

Curricular Theory

Because middle school curricular theory is still not absolutely defined, we observe many schools with radically different programs calling themselves middle schools. In fact, the ideal curriculum of the middle school is as elusive as its ideal age/grade organization. Toepfer argues that this variety is a virtue, since a good middle school should always be organized in light of local student and community needs.

To some extent, middle schools *are* affected by local situations and acquire a special flavor. But on the most general level, we can isolate some characteristics that define the middle school program. Perhaps the most important characteristic is its continuing innovativeness and its willingness to experiment with new methods and new organizational structures. Its goal is to create a relevant program to meet the unique needs of middle-school-age children in terms of their intellectual, social, and physical abilities without adopting junior-sized versions of high school programs.

The middle school program tends to be learner-oriented as opposed to being subject-oriented like the high school program. The curriculum recognizes the great differences

among transescent learners by providing for self-defined goals, individualized programs, and independent rates and areas of study. The key concepts of the middle school curriculum, according to Curtis and Bidwell, are personalization, synthesis, and exploration. Georgiady and Romano define the middle school as being characterized by team teaching, a multi-material approach, gradualism, flexible schedules, and appropriate social experiences.

These are elusive goals, and they are pursued under a variety of programs with a variety of methods. For the sake of convenience, we will first discuss three very general kinds of curricula found in various middle schools. Later in this chapter, we will examine teaching methods, scheduling, and other more specific aspects of curriculum. In actual practice, no distinct line can be drawn between kinds of curricula, just as one cannot really separate a curriculum from the means by which it is implemented. All we can do here is identify some constants in the middle school curriculum. (This paper does not discuss material written on specific course proposals. Several papers that discuss programs in science, language studies, home economics, and the humanities are listed in the bibliography.)

Concept-Based Curriculum

In its attempts to integrate and synthesize knowledge, the middle school moves away from teaching by subject matter or discipline to teaching by concepts. In this kind of curriculum, the emphasis is on presenting an interdisciplinary cluster of related subjects.

DiVirgilio (1974) argues that the middle schools have a curriculum vacuum in exactly this area. Many of them insist on teaching single subjects and do not encourage the best use of interdisciplinary teaching. Elsewhere DiVirgilio (1972) attacks the middle school curriculum that uses traditional subject matter disciplines, maintains the same internal organization within grades as exists for their elementary and junior high counterparts, emphasizes "exploratory" programs, and devotes core-type blocks of time to subject-oriented areas like English,

social studies, and mathematics and science.

According to DiVirgilio, a good middle school uses its curriculum content to develop all aspects of the human being. He concludes that the "best curriculum for the preadolescent is not necessarily that which someone determines will prepare him for high school but one that will commence where he is an individual learner." However, he is opposed to many practices in the middle school such as numerous electives and minicourses that so often result in "a smattering of a lot of nothingness."

Individualized Curriculum

Individualized learning is one of the favorite suggestions for middle school curricula. There are many variations for middle school curricula. There are many variations among individualized programs, but the common denominator is their focus on providing individualized instruction to suit the personal learning style of each pupil.

Kratzner and Mannies discuss an individualized learning program that stresses interaction, researching, thinking, speaking, and writing skills. Their curriculum, like DiVirgilio's, is concept-oriented rather than subject-oriented. Kinds of activities include directed studies, minicourses, individual studies, and pupil-directed projects. The amount of structure or freedom of choice allowed the pupil in each activity varies in accordance with the degree of development in the student's interaction skills. Some students seem to need, and feel more comfortable in, a structured classroom with a single teacher. Others can work in small groups on interdisciplinary projects. The most advanced and mature students are allowed to engage in independent reading and writing projects and to progress at their own pace.

According to Kratzner and Mannies, the school's role is one of "teaching pupils those skills which are crucial to the problem-solving process." The ability to cope with change must be the outcome of today's education. A similar program is the Intensified Learning Plan (ILP) described by Evans. In this program the school year is organized into trimesters and students concentrate on fewer subjects for longer daily periods.

Traditional Curricula

Not all schools that call themselves middle schools adopt a radical view toward the breaking up of the subject orientation found commonly in the junior high school. In a 1968 survey Costantino compared three middle schools and three junior highs in Pennsylvania. In 60 percent of the classes he analyzed, the curriculum was derived from a single textbook. "Classes in both types of schools were, overall, teacher-controlled and grouped homogeneously." In a survey of middle schools in the Upper Midwest, Sinks and others discovered that a high percentage of the middle schools surveyed were organized by department. Traditional courses in language arts, math, social studies, and science and physical education were required at virtually 100 percent of the schools. On the other hand, articles and surveys show that numerous schools calling themselves junior highs have adopted many of the programs pioneered by the middle school. For example, Hunt and Jones discovered programs utilizing continuous progress plans, skill groupings, and individualized instruction in math and science at as many junior highs as middle schools.

Career Guidance

Vocational counseling in the middle school is part of the theoretical swing in education back to the practical, to the "real world." While career guidance cannot actually be called a curriculum, it bulks so large in the intermediate school program that it deserves some attention.

A frequent criticism of vocational guidance at the elementary and middle school levels is that students are too young. Why should they be pushed into career choices prematurely? Roberts answers this objection by emphasizing that what should be offered is exposure to occupations, not specific directions in choosing one: "Young children can be aware of the idea of work or specific occupations and still grow up being full-time children without risking a career choice at the tender age of nine." Roberts endorses the basic objectives of a model proposed by Bank for students, teachers, parents, and the community:

- to provide role models the child can identify with, thus aiding in development and implementation of his self-concept
- to provide adequate opportunities for continued expansion of the child's vocational horizons
- to assist the child in developing appropriate attitudes toward work
- to provide opportunities for expansion of the child's vocational vocabulary

Opponents of intermediate vocational guidance argue that it takes away time from education. To this, Roberts and other writers respond that vocational guidance is not inconsistent with the goals of general education. On the contrary, it can be a prime vehicle for achieving proficiency, ability, and command by providing learning experiences involving motivation, critical thinking, decision-making, self-awareness, self-evaluation, and self-direction.

The career guidance program is one area in which the middle school can adapt programs that spring from and serve the local community. In fact, in this respect the middle school program seems ideal to serve the needs of career guidance. In a program in Connecticut (Gagliardi) and another in St. Louis (Foster, Faith, and others), the community is involved extensively. Local professionals speak to school groups and students take field trips to local job sites, talk with workers on the job, view films, slides, and learn the language of the adult working world. In the Connecticut program, students investigate "career clusters" via an interdisciplinary method. Students do not investigate single jobs, but rather they learn how an area of work or profession requires many people with different job skills and talents.

Many people advocate career education and vocational counseling as a solution to the problems of preparing disadvantaged youth for a useful place in society. Two vocational-occupational guidance institutes sponsored by the Ford Foundation in 1969 and 1971 sought to provide optimum career development for the urban middle school child. The

institutes were conducted jointly by the Department of Labor and the National Alliance of Businessmen, and their objectives were commendable. But care should be taken in such programs to avoid a "spoiled image." That is, they should not be limited to disadvantaged or lower-class youth. Furthermore, the world of work should receive full, unbiased treatment with both white- and blue-collar jobs treated realistically.

Curricular Practices

While curricular theory is often difficult to pin down, the middle school has instituted some definite curricular practices that can be more easily discussed. Again, as with curricular theory, these innovations appear in various combinations in different middle schools and have been adopted by many junior high schools as well. We will discuss these innovations under three headings: innovations in classroom teaching, innovations in scheduling and building organization, and innovations in the library and media support the middle school requires.

Teaching Methods

One of the most basic goals in middle school theory is to break down the traditional, one classroom-one teacher approach to instruction. To observers like DiVirgilio (1974), one teacher in a classroom smacks of the subject specialization of the high school. He and others argue for interdisciplinary courses with two or more teachers sharing a subject or "concept" area. Team teaching and the interdisciplinary philosophy are closely related and are probably the most basic and unique aspects of the middle school attempt to broaden and integrate subject matter in the intermediate school.

Team teaching. The success of team teaching is difficult to measure. A number of writers speak enthusiastically of successful and challenging programs (*see* Brick, Huie, and DiVirgilio). But many also warn of difficulties in undertaking a complex program without an adequately prepared staff. Tyrrell and others report that their team's observation of several middle schools in Ohio uncovered a number of schools where team

teaching had been tried and then discarded for the traditional method. He cites inadequate inservice preparation for the failure.

In schools where team teaching is employed, it has not always produced the anticipated results. Odetola and his co-researchers were surprised by their findings that teacher-teams in a middle school organization failed to enhance students' identification with the school or reduce feelings of powerlessness any more than typical junior high schools are able to do these things. The researchers compared three groups in their sample: middle school teacher-teams; middle school one-teacher, one-class system; and junior high one-teacher system. On questions designed to elicit the students' sense of belonging, pride, happiness, powerlessness, and degree of alienation, the one-teacher middle school rated the most positive in all areas but one. The exception was powerlessness, where the junior high teachers scored better. In every case, the middle school teacher-teams fared the worst. In seeking explanations for these "reverse" findings, the investigators suggest that the teacher-teams appeared to cause less, rather than more, personal relationships to exist between teachers and students. Also, middle school students may get more, not less, social and psychological security from a single teacher.

Individual Instruction. A different approach to the teacher-pupil relationship in the classroom is required in an individualized learning program. In this more truly learner-oriented practice, the teacher makes materials available and provides students with materials that are often self-graded, self-stimulating, and project-oriented. Generally emphasized in this kind of program is a packet or a group of materials that each student works through on his or her own. Many schools report success in programs where students write their own packets. Such a program retains the best elements of the one-teacher, one-classroom relationship, which fosters a feeling of belonging, progress, and individual attention. The individualized learning approach is flexible and has been used in every area from the sciences to language arts and literature.

Evaluation. In an attempt to give the student the greatest

freedom to progress at his own individual rate and in the belief that traditional grading encourages harmful competition, is punitive, and evaluates group rather than individual performance, the middle school has experimented with grading systems. One alternative grading system (in the Intensified Learning Plan) used tests, questionnaires, and conferences to measure the accomplishment of criterion objectives. The fullest treatment of an ungraded system of evaluation is provided by McCarthy. He discusses organizational structure, curriculum, staff deployment, independent study, the principalship, and guidance—all as they relate to an ungraded school.

Weber endorses the importance of including parents in discussions of nongrading. In interviews, when she asked middle school students how they felt about the grading system (criterion-referenced items rather than grades), some replied they did not like to be "different from kids at other schools." Some also thought their parents did not understand the new system. Both pupils and parents in some cases wanted grades in order to "know how they were doing." Grades, accurate or not, meant something to them.

Whether educators will be able to devise an acceptable method of reporting student progress remains to be seen. "Instructional processes which seem best for this age level center on the individual, while traditional marking systems are based upon group performance," Eichhorn (1972) observes. "The challenge is to develop a communications program so that parents are informed of a child's progress in a manner which is acceptable to the parents but which does not destroy progress."

Minicourses, Schedules, and Open Space

Among the middle school's more visible innovations are those experiments in scheduling and building organization. A structural innovation in subject matter is the introduction of the minicourse. These courses, often of a short duration, include a tremendous variety of subjects often in individualized or interdisciplinary formats. (*See* Vaupel for some sample

minicourses.) Minicourses are similar in some ways to the elective courses of the junior high school. In fact, to DiVirgilio (1974), minicourses are symptomatic of the fragmentation and specialization of both the junior and senior high schools.

To accommodate both the minicourses, which are of short duration, and the "unified area" courses, longer classes that treat several subjects in an interdisciplinary fashion, the middle school has often modified its scheduling of classes. A typical middle school schedule is composed of "modules," short units of time in the schedule that can be added together to form larger units. In some cases, the middle school offers a minisemester when one subject is studied intensively. The number of different time possibilities are endless. Someone curious to examine a middle school time schedule might consult English and Canady. Time schedules are finicky things, however, and most writers recognize that a schedule must grow out of an individual school's needs.

Perhaps the most radical structural change in the middle school, and the least successful in some respects, is the concept of "open space." An open space school eliminates many of the walls between classrooms and work areas in an attempt to erase artificial distinctions between kinds of activities. The open space school exists ideally to make more complete use of space, while at the same time allowing students more freedom of movement and a wider range of physical activities. Many new middle schools are being designed with moveable partitions, multipurpose areas, lounging areas, and media laboratories. (*See* Bick for a bibliography on middle school design.)

The open space school has come in for its share of criticism, however. In his survey, Tyrrell and others report that their team in Ohio found little of significance or innovativeness being carried out in open space schools. He remarks that the staff seemed overwhelmed by the sense of space and was hard put to make full use of it. Some question also exists about the benefits open space schools are supposed to confer. McPartland and Epstein's survey concludes that students from average income families will probably do well in open space schools, but that many lower-income students would be at a disadvant-

age. In general, they conclude, "the openness of instructional approach is of minor consequence for the academic outcome of the average student." Too few open schools exist yet to be able to fully determine the effects of open space on students and curricula.

Support Services

The unique nature of open classrooms, interdisciplinary courses, and individualized learning puts a great deal of strain on support services in the middle schools. Of most importance to us here is the role of the media center. No longer is the traditional library adequate to the demands of the intermediate school. Explosive growth in technology has required the expertise of a person fully trained in the numerous materials one now finds in the classrooms: transparencies, films, filmstrips, records, reading labs, and even sophisticated video and television equipment. As Garvelink warns, middle schools should be prepared to invest heavily in updating library materials.

The importance of libraries—or media centers or media labs—is reflected in new middle school building design. The most common design for new buildings is one in which the building resembles a wheel with the media center at the hub and the classrooms (often called "pods") radiating out as spokes.

The middle school has been a fertile testing ground for new ideas. Eichhorn (1972) concludes that "there is no quarrel with any of these approaches because each has and can provide sound direction, given the right set of variables." But, he warns, it is wrong to assume that "unless one fully subscribes to one or the other, the chance for success is greatly reduced. . . . These devices should be considered as tools."

One of the persistent problems in current attempts to institute middle schools is the quality of instruction. It is all very fine to talk about the goals of middle schools and ways in which these goals might be accomplished. But as Lounsbury and Vars observe, "The staff and the curriculum are what really make the school."

Teachers

No doubt teachers are the key to success in the middle school. Gatewood and Mills warn that the "middle school concept has not and never will be successfully achieved unless future middle school teachers are markedly different from their present-day counterparts." While academic training is important, equally important is a commitment to working with ten- to fourteen-year-old students. Richardson calls the difficulty of organizing a staff of teachers who really understand and appreciate children of this age group a major difficulty in the evolution of middle schools. Garvelink warns that the evolution of a middle school often necessitates kicking some intransigent teachers upstairs to the high school. Personality, temperament, and attitude toward emerging adolescents prevent many teachers from being successful at this level of teaching.

The Problem: Inadequate Preparation and Motivation

In addition to the problems of temperament, equally serious problems exist in the area of teacher preparation. Despite the fact that junior high schools have existed since the turn of the century, teacher education institutions have done little in the way of recognizing the need for teachers at the intermediate level. Therefore, most of those teaching in middle schools at present possess elementary or secondary

certificates, and there is little indication that this situation will change appreciably in the near future.

In his 1973 survey of 639 colleges that are members of the American Association of Colleges for Teacher Education, Gatewood reports that only 22.6 percent had a program of preservice education for middle school teachers. Most teachers at the intermediate level have secondary degrees. A similar survey by Krinsky and Pumerantz in 1969-70 reveals almost exactly the same figures. Equally disconcerting is the fact that each of the three states with the greatest number of middle schools—Texas, Illinois, California—has just one teacher-training institution with a middle school teacher curriculum. Nor do any of these states have any present or planned middle school certification standards.

Another unfortunate consequence of ignoring the intermediate level, as Moss (1971) notes, is that most males currently teach at either junior highs or secondary schools. Male teachers are needed at all levels, but particularly in elementary and middle schools. Moss proposes that the sex ratio for both teachers and principals ought to approach 50/50.

In general, teacher-education institutions are turning out, for careers in the middle school, elementary and secondary teachers who lack both proper orientation to the philosophy and psychology of the middle school and adequate preparation for its organizational and instructional patterns and techniques. Present inservice programs are usually confined to unstructured and limited staff consultant services.

Stainbrook studied the professional preparation of Indiana's junior high teachers in 1959. He repeated his investigation in 1970, adding middle school teachers to his sample, and then compared his results with those of a decade earlier. His conclusions are no less pessimistic than those of Gatewood, and Krinsky and Pumerantz:

- There are no major identifiable differences between the professional preparation of today's junior high teachers and those of ten years ago.
- The professional preparation of middle and junior high

school teachers in Indiana is quite similar, usually with emphasis on secondary education.

- Teachers and principals of both middle and junior high schools agree that special curricula oriented toward preparation of intermediate teachers would be valuable.
- Inservice college classes specifically related to the junior high are no more frequently a part of the junior high school teacher's inservice activities than they were ten years ago.
- Middle school teachers are no more involved in inservice acts than junior high teachers.

Needed: Training Geared to Middle Schools

Teacher education institutions are not solely responsible for the failure so far to adequately prepare intermediate teachers. In fact, the greater share of blame probably belongs to those state education departments and even professional organizations that ignore the existence of a level of education between elementary and secondary. Educational theory and conventions usually travel from the top down, but the practical need for competent middle school teachers is obvious in the local school district. Those at the intermediate level must start communicating their needs to the organizations that can do something about them, rather than the other way around.

Greater cooperation among local school districts, teacher-training institutions, and state certification agencies pertaining to middle school education is advocated by Krinsky and Pumerantz. "Through a lack of commitment and initiative," they state, "the colleges of education are in reality perpetuating incompetence in middle education." Also to the point is Eichhorn's (1972) statement:

> The prevailing attitude continues to be: prepare teachers for the elementary and high school and the middle school/junior high school staffing will take care of itself.
>
> . . . this lack of emphasis deprives students, at a crucial period, of the professional expertise that the elementary, high school, and university levels enjoy. . . .
>
> The basic problem is a lack of recognition that this level has traditionally received. . . .
>
> There is a crucial need for professional associations, representing all levels of education, to pool their talents in an

> effort to aid and support the development of programs for youngsters in the middle. . . . While school districts throughout this nation initiate changes in early adolescent education, progress is curtailed and even ended by restraints imposed by related agencies.

In an ideal situation, what would a teacher education program for the middle school teacher consist of? What would it emphasize? Geisinger stresses an emphasis on technical skills for instruction, media utilization, and skills in developing new curricula appropriate to the developmental school. Actual teacher training, according to Curtis, should ideally be based on proven competency rather than on courses completed or grades received. He suggests a revised program in which attention is given to eight areas, with emphasis on practice and experience.

The model of teacher training that Gatewood and Mills propose places the prospective teacher in the classroom early in his preparation. The student would receive lab credits for teaching, counseling, tutoring, and observation in the classroom. Working with the prospective teacher would be a university faculty member, who also teaches a course in a major area in the middle school. Several problems are solved by this program. The student gets an early introduction to the unique structure of the middle school classroom, the university educator keeps in touch with his discipline and keeps his skills in tune, and the program provides a means for the professional educator in the public school to affect teaching practices in the universities. Gatewood and Mills also endorse a competency-based approach.

Both Clarke and Lawrence also favor the competency-based approach. Clarke makes several timely recommendations for restructuring the middle school teaching curriculum with respect to both content and method. More than at any other level, the intermediate teacher must be eager, energetic, and enthusiastic. But many college methods teachers set an example of the kind of passive-learning lecture format that produces teachers who perceive themselves as lecturers, specialists, and authorities. Such role perceptions are completely inappropriate to the middle school. Clarke urges

the combination of college courses for integrated learning so that the prospective teacher can know *how* to structure his discipline, *why* certain experiences are valuable, and *what* learning experiences are needed.

Lawrence recommends the replacement of current emphasis on course grades with three sets of competency criteria: personal qualities, understanding, and instructional skills. Noting that the competency approach must be built on a solid rationale and research base, Lawrence concludes that while there is initial evidence of a significant relationship between his proposed competencies and classroom observations, the ultimate test of this approach is the long-term effect it has on the students and the school. In his view, the competency approach seems well suited both to the middle school movement and to new pressures in teacher education.

Inservice Training

While these recommendations contain merit, at best they are blueprints for the future. Schools today face the problem of trying to implement new programs with traditionally trained personnel. As an immediate step, several writers recommend instituting more inservice teacher education. Curtis and others believe that the way to get trained personnel is to offer programs in the schools themselves. Using his own competency criteria, Lawrence suggests that specific competencies of the inservice teacher be identified as fulfilling partially or completely the middle school certificate requirements. He also suggests that materials be provided so the teacher can build other required competencies without returning to a university. Stainbrook adds the following list of inservice practices:

- Inservice education activities oriented to the middle school and/or junior high should be encouraged for intermediate school teachers, especially for the younger and/or less experienced.
- Both middle school and junior high schools need their own individually organized inservice education programs to deal with the specific needs of intermediate school teachers.
- Both middle schools and junior highs need some organized orientation program for new staff members.

- For intermediate teachers, especially those in middle schools, inservice activities and instructional leadership by the school principal should include pride in and dedication to teaching in that kind of school.

Clearly, until the universities begin to train and certify intermediate teachers, the schools will have to train their own.

Principals

Aside from a few isolated instances, researchers have not addressed themselves to principals. Even fewer have conducted research *about* middle school principals. This should come as a surprise, since middle school principals are ultimately responsible for the education of transescents.

An article by Bobroff, Howard, and Howard is a welcome exception to the general lack of attention paid to principals. The researchers surveyed a random sample of intermediate-level principals from seven states to find out how the principals view their job preparation and actual job requirements. In observing their findings, one should keep in mind that approximately two-thirds of the principals were from junior high schools and a little less than one-third from middle schools. Subjects were asked to provide information about

- previous experience as an administrator, teacher, or counselor
- reasons for holding their present positions
- professional training
- essential abilities, competencies, experiences, attitudes, and characteristics
- problem areas
- reasons for diminished effectiveness or failure
- perceived functions of the school in the middle

The survey yielded many interesting results. Particularly noteworthy were the administrators' responses regarding professional training of principals and important functions of the school.

First, in the area of professional preparation, principals are no better off than middle school teachers and counselors:

> . . . the principal of the junior high and middle school has seldom had specific training for the position. He clearly sees the need for such preparation and is particularly aware of the need for studying adolescent psychology and understanding the characteristics of this age group.

The lack of formal training in how to deal with preadolescents does not imply, however, that intermediate principals are totally unsuited to their jobs. Many make up for such deficits with their attraction to this age group.

The second, and more surprising, finding arose out of a question asking the principals to rank various school functions in order of importance. Contrary to the large body of literature stressing the exploratory functions of the middle school, "the responding principals perceived the transitional functions . . . to be of greater importance than any other."

The only specific recommendations available for principal training are Slate's. Principals should definitely have teaching experience in the middle school and should evince a knowledge of children's growth characteristics. A priority in principal training should be given to adolescent psychology and curriculum development.

Counselors

The ambivalent natures and varying rates of maturation among emerging adolescents make them good candidates for counseling. That is, they are more in need of and more open to the benefits of personal guidance than any other age group.

Gatewood's research reveals that counseling for preadolescents is more prevalent in junior highs than in middle schools. Some middle school planners and administrators assume—falsely—that preadolescent guidance is adequately taken care of by homeroom teachers. But in fact, homeroom teachers have neither the training nor the opportunity to counsel students. At any rate, it is doubtful whether every student would relish the idea of being counseled in front of his peers.

Stainbrook feels that the lack of coursework in counseling and guidance is a major flaw in intermediate teacher training. Either in specific courses or as part of their overall professional education, these teachers' understanding of and skills in coun-

seling should be developed to a degree that enables them to contribute effectively to the guidance function.

Perhaps teachers do need more counseling ability in the intermediate grades. It is certain that at this point administrators cannot safely assume teacher expertise in guidance. Most supporters of guidance for middle school students, however, insist on the hiring of professional guidance counselors.

Haller defines the role of a professional counselor in the middle school. He also anticipates and describes potential resistance to a guidance program by administrators, teachers, and parents. Some would see it as wasteful of time and resources, others as a low-priority item. Besides outlining his own personal philosophy of guidance, Haller enumerates possible concrete steps to meet these and other objections.

As in teacher education, no traditional counselor education program exists for those wanting to serve in middle schools. To remedy this situation, Knudsen (who uses the terms "middle school" and "junior high school" interchangeably) suggests that we examine and evaluate the characteristics of elementary and secondary school guidance in order to provide continuity with the middle school. Competence in peer relationships and group counseling are recommended as supplements to individual counseling.

Group counseling is one of several examples of successful intermediate-level guidance programs documented by McDonough. The development of teacher-advisers, good counselor/teacher as well as counselor/student relationships, and expansion of guidance services into the community are also mentioned.

CONCLUSION

The middle school movement has generated optimism, interest, and new respect for the problems of educating intermediate age children. To an extent, the measure of its success lies paradoxically in the number of innovations that have been carried over into junior high school. More and more junior high schools are instituting interdisciplinary and individualized learning programs pioneered by the middle school, a fact that surprisingly does not cheer the hearts of some middle school advocates who interpret the phenomenon as the corruption of a purer philosophy. But as the two following examples show, there is an even broader gulf between practices in some intermediate schools.

The first example comes from the community of Beachwood, Ohio, where Ronald Tyrrell reports on the rare opportunity this community had to institute a brand-new middle school literally from the ground up. The district built an innovative open space building, instituted new programs, and encouraged flexibility and experimentation. After much frustration, the Beachwood Middle School succeeded, primarily because it was able to dissociate itself completely from past educational practices. All in all, Beachwood is a success story in the history of the middle school.

On the other hand, Moss (1974) claims to know of at least two suburban districts contemplating a return to the 6-3-3 type of grade organization, the organization universally decried by most middle school and junior high theorists. While such a step would totally reverse the gains of the middle school, Moss claims the return to the older organization may become a real possibility in a decade of declining enrollments and pressures on school districts to economize.

The real issue in intermediate education is not whether the middle school will triumph over the junior high. It is whether any of the progressive reforms of the middle schools and junior

highs will be retained during a period of economic retrenchment in school districts. Middle school spokesmen need to recognize more fully the goals they share with educators in the numerous progressive junior high schools to ensure the success of their programs. Lounsbury and Vars optimistically point out that junior high and middle schools are in many ways similar and have an identical goal—that of providing vital and appropriate experiences for youth in the critical transitional years. The similarity of their goals calls for a cooperative effort.

By transferring their concerns to an evaluation of programs and common problems and away from arguments about names and grade organizations, educators in the intermediate schools will have enough to keep them busy. Eichhorn (1972) lists the five challenges that are still being posed for emerging adolescent education:

1. Can middle school educators move beyond the argument of which grades should be in the middle/junior high school?
2. Can middle school educators develop proper perspective regarding the place and function of organizational technique?
3. Can educators devise an acceptable method of reporting student progress?
4. Can educators of emerging adolescents create an effective alliance with higher education, state departments of education, and professional associations?
5. Will the middle school movement accept in practice the theory of uniqueness?

These five areas—deemphasis of grade/age level; awareness of the proper relationship between techniques and goals; student evaluation; formal, explicit recognition by education's power hierarchy; and practical recognition of the uniqueness of the middle school child—are indeed the foremost challenges in the middle school movement.

Nesbitt comments, "Perhaps the real strength of the middle school movement lies in the fact that nothing is settled—that we are witnessing a rebirth of interest in exploration and experimentation. . . ." Applauding the potential of the middle school, Eichhorn feels that its success will ultimately rest on the "willingness of those committed to this organization to pioneer

creative programs designed specifically for the early adolescent learner" because "the future of any endeavor depends upon the expertise and commitment of its advocates."

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